II: THE WILLIAM ELLIOT AND ANDREW JACKSON WILLIAMS HOUSES: HISTORIC THEMES

Architecture, Engineering & Decorative Arts

Architecture, Engineering, & Decorative Arts as a historic theme in the period 1830-1880 +/- relates to the Elliot and Williams houses. A wide variety of architectural styles were prevalent during this period. In the early and mid-nineteenth century Greek Revival and Gothic Revival were popular modes of architectural expression. The Victorian era witnessed a proliferation of styles, including Italianate, Queen Anne, Stick/Eastlake, and Shingle Style. The majority of these styles were primarily formal expressions of aesthetic taste and social status. Although these styles influenced vernacular building traditions, utilitarian requirements remained the dominant characteristic of American housing in the midnineteenth century. The homes of the rural middle-class, which the Elliot and the Williams houses document, subtly exhibited variety through the eclectic use of ornamental motifs, such as cornice moldings and brackets. The tempered ornamental eclecticism exhibited by the Elliot and Williams houses reflects a concern for shelter and home, rather than a desire to make a public statement through architecture. Detailed descriptions of the two houses reveal this emphasis on utilitarian requirements and the lack of a dominant architectural style.

William Elliot House

The William Elliot House (Plate 1) is located at 2206 Newport Gap Pike, Wilmington, Delaware, on roughly 1.5 acres on the south side of Newport Gap Pike (State Route 41), approximately 0.3 miles west of its intersection with Kirkwood Highway (State Route 2). Situated on the floodplain of the Red Clay Creek, approximately 200 feet east of the creek, the dwelling is surrounded by mature trees with a large open lawn to the south. A hedge shields the house along its 172-foot frontage with Newport Gap Pike. At the time of this examination, the structures' architectural character remained intact. Subsequent vandalism has stripped the building of all original fabric.

Probably built in the 1870s, the dwelling is a three-bay, two-and-one-half-story, gable-roofed, frame structure with a center gable. A two-bay,

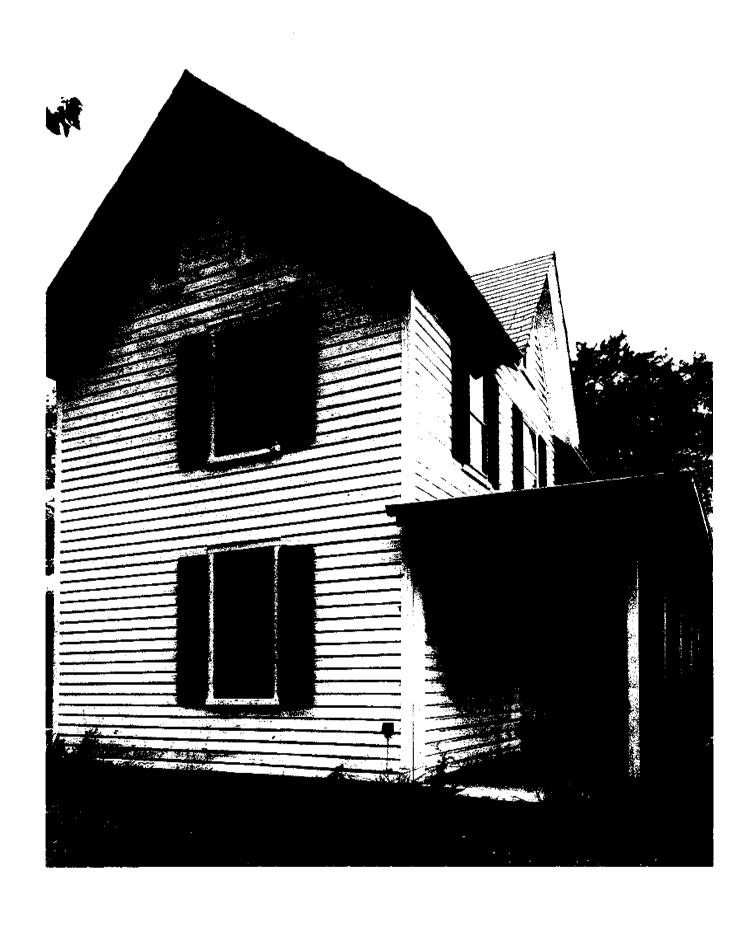


PLATE 1: The William Elliot House (Photograph by David L. Ames, 1987)

two-story, shed-roofed rear ell forms the northwest facade. A third bay on the northwest facade is part of a one-story frame shed-roof addition that wraps around the southeast facade of the ell (Plate 2). This addition exhibits two periods of construction, the earlier section extending to the southwest of the ell. Another section added in more recent times runs along the whole length of the southeast facade of the ell and the earlier addition. The dimensions of the northeast and northwest facades measure roughly 28½ feet by 36½ feet.

The foundation of the original structure consists of stuccoed field-stone. Stuccoed concrete blocks and fieldstone were used as foundation materials under the additions. The entire structure is sheathed with German siding that measures 5½ inches wide and 1 inch thick. Five inches of siding are revealed after the overlap of the boards. The northeast facade is covered by a full-length hip-roofed porch supported by five square posts on a 7-foot by 28½-foot poured concrete pad. A single interior end chimney stack topped with a terra cotta/ceramic pot penetrates the shed roof of the ell. All roofs are sheathed with asphalt shingles and exhibit projecting cornices ornamented with fascia and cyma recta molding.

There are currently three exterior entrances into the dwelling. The centrally placed formal entrance in the northeast facade consists of two elongated arch-shaped panels with molded rails over two rectangular panels. Unadorned surrounds are crowned by a two-light rectangular transom. Modern press board doors with plain surrounds are located on the southeast and southwest additions. Seams in the German siding below the window in the southeast facade of the original structure may denote a former entrance. A similar seam in the northwest facade of the earlier addition may have also been an earlier entrance.

Ground-level windows on the original structure are treated with unadorned surrounds and sills, flanked with paneled shutters. Unadorned lintels are capped with small protruding shelves. Except for louvered shutters, second-story window treatment is similar to the first story. All windows on both floors of the original structure are six-over-six light sash. Although the hinge pintles remain on the walls of the dwelling, many of the shutters are nailed or screwed to the weatherboard. Some shutters have been installed upside down. A two-over-two light sash window, with the upper sash matching the peak of the cross gable, allows light into the

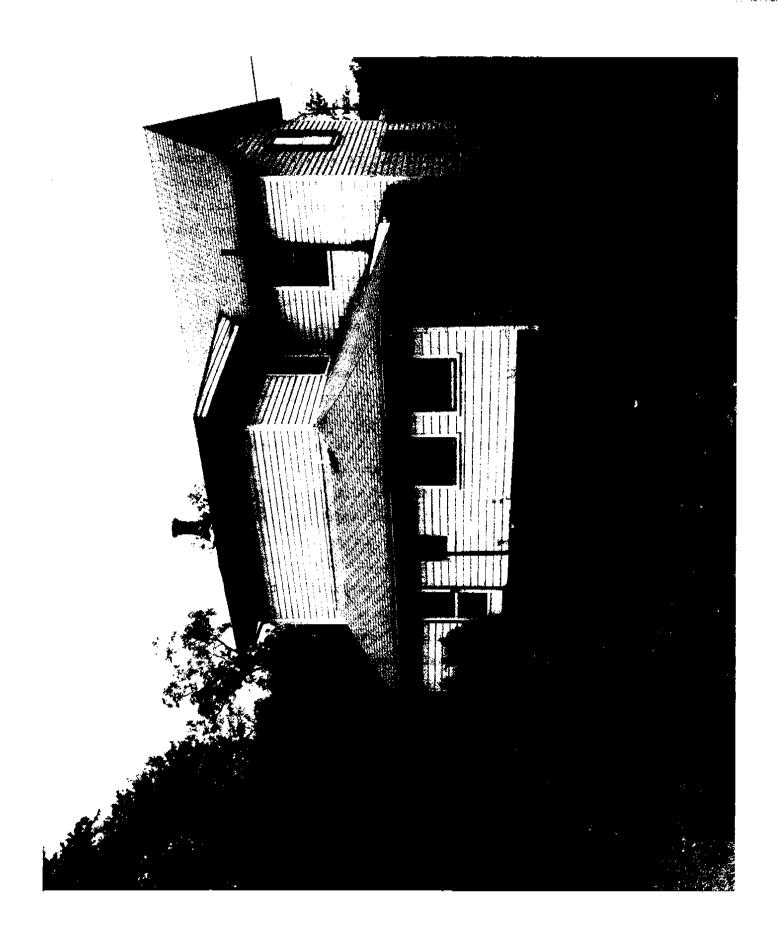


PLATE 2: Rear View of the Elliot House (Photograph by David L. Ames, 1987)

attic. Two pairs of one-over-one sash windows penetrate the peaks of either gable end. One six-over-six light sash window sits in the northwest wall of the addition. Five modern one-over-one light aluminum sash windows line the southwest and southeast walls of the newer addition.

The interior space of the original dwelling is divided into a two room or hall-parlor plan with a rear ell used as a kitchen (Figure 3). The two rooms are of approximately equal dimensions but have been oriented on different axes. One enters through the northeast facade into the wider of the front rooms or the hall, located in the north corner of the structure. Windows penetrate the northeast and northwest walls. A door to the southwest leads to a stairway. The stairwell to the second story is located between the kitchen and the hall. There are 12 treads, each 2 feet 8 inches wide, 95 inches deep with a 75 inch rise. Another door enters into the parlor in the east corner of the dwelling. The removal of some of the paneling in the south corner of the hall revealed a doorway that entered a small interior vestibule where entry to the kitchen, the parlor, and the basement stairway converged.

The parlor contains two windows, one in the northeast wall, the other in the southeast. A door in the west corner leads into the previously mentioned vestibule. The stairs to the full basement, accessed from the vestibule, consist of 9 treads, each 3 inches wide and 8 inches deep with 8 inch risers. Structural features revealed in the basement include 3-inch by 8-inch circular sawn joists as well as tongue and groove plank flooring that average 3 inches wide. The basement also has a poured concrete floor and stuccoed fieldstone walls.

The kitchen has two windows opposite each other on the northwest and southeast walls. The southeast window opens into a half-bathroom installed in the more recent addition. A paneled door exits into this addition, while a similar door enters the earlier addition through the southwest wall. A slender chimney pile also protrudes from the center of this wall.

A moveable two-step stair allows descent into the older addition from the kitchen. Immediately to the right is a window. Another window penetrates the southwest wall where a door leads to the rear yard via a two tread concrete block step. A door on the southeast wall leads into the newer addition. Removal of paneling on this wall revealed horizontal tongue-and-groove planks that overlapped the south corner post of the ell.

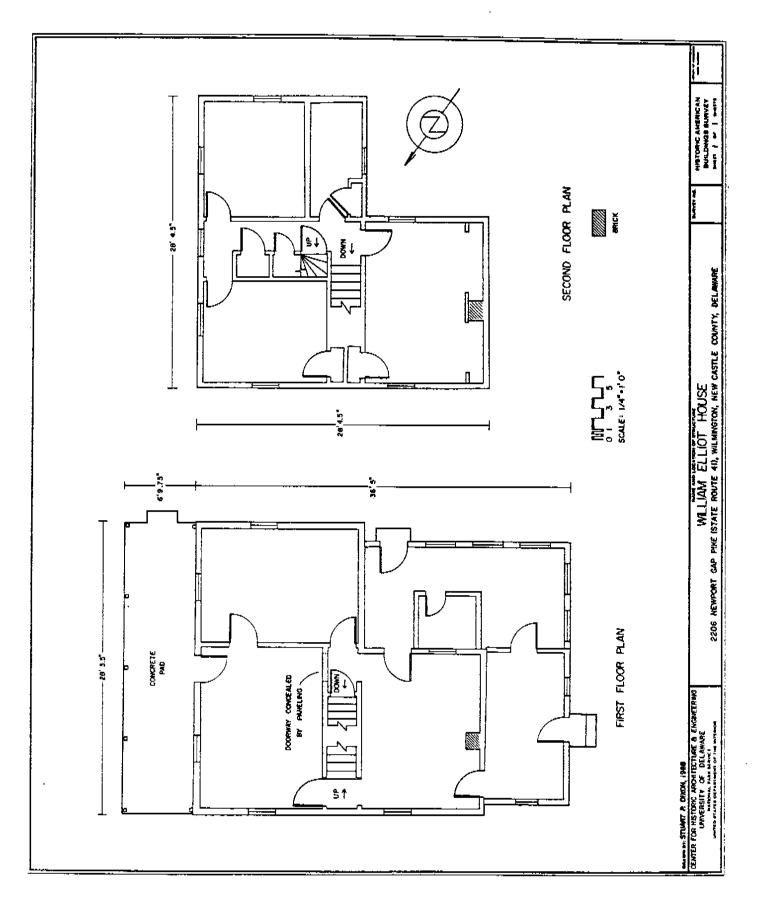


FIGURE 3: Floor Plan of the William Elliot House (Drawn by Stuart Dixon)

The most recent portion of the shed-roof addition contains two windows in the southwest wall and three windows and a door in the southeast wall. A small half-bathroom has been installed in the addition by attaching modern wooden paneling to both sides of stud framing. A single concrete step lies outside the door to the exterior.

On the second floor, a large bedroom lies immediately to the southwest of the top of the stairs. A stud frame covered with modern wooden paneling has been installed along the southwest wall in order to make two closets. This framing and paneling also conceals a slender chimney pile. In the north corner of the room a door opens into an original smaller closet.

At the top of the stairs, a hallway stretches to the northeast wall and a window that is flanked by two rooms. Along the northwest wall of this hallway are three doors, the first revealing the stairs to the attic while the others open into closets. The bedroom in the northwest corner of the house contains a closet and one window on each of its exterior walls. Another smaller bedroom, in the northeast corner of the house, has windows comparably placed in its exterior walls. Entrance into a full bathroom, placed behind this smaller bedroom, is accomplished through a doorway at the top of the stairs.

The attic stairs consist of eight treads that turn ninety degrees above the hall closets. The attic is split into two rooms of roughly equal dimensions. The northeast half of the attic is enclosed by a thin wall finished with lath and plaster, as is the inside of the enclosed space. A vertical board-and-batten door allows entry into the finished room. The northwest half of the attic, into which the attic stairs empty, is unfinished. Common rafters are butted to a ridge board and lapped to a floor board doubling as a false plate. Chimney piles are also visible at both gable ends indicating that the piles on the lower floors were removed at some earlier date.

An interesting structural element revealed in the attic is the framing for the shed roof of the ell. Shallowly sloped rafters, butted to the common rafters of the gable, have been placed perpendicularly above the ceiling joists of the ell. Wood shingles, still attached to the shingle lath with machine made wire nails, were present underneath the joint of the shed roof with the gable roof. Apparently the roof of the ell was either flat or at a shallower angle at an earlier date. If this were not the

case, shingles would not have been installed lower than the current shedroof. Close inspection of the cornice treatment supports this interpretation. The ornamented cornice of the ell, which forms an uninterrupted roof
line with the gable's cornice, begins two feet lower than the joint of the
ell's shed-roof with the gable. The intervening space between the actual
roof line of the ell and the cornice has been adorned with German siding
flush with the edge of the shed-roof and the gable's projecting cornice,
not the massing of the wall. A box cornice above the cyma molding on the
cornice of the southwest facade also conceals rain spouts of an earlier
roof system. An aluminum gutter attached to the box cornice currently
collects rainfall off the roof of the ell.

Throughout the interior of the original structure, window and door treatment consists of molded surrounds. One interesting feature is a two-light transom similar to the transom in the formal entrance that tops the entry into the kitchen from the stairway landing. All rooms on the first floor are sheathed with modern wooden paneling, different shades installed in each room. Formica was also used in the kitchen and rear addition in combination with modern paneling. Quarter round molding was used in many corner joints. Wall to wall carpeting covers the flooring of all rooms except the kitchen, which is sheathed with linoleum.

The original field examination of the Elliot House was conducted in September 1987. Between October 1987 and January 1988, vandals destroyed or removed much of its original architectural integrity. Exterior siding has been stripped off the northwest and the southwest facades, revealing circular-sawn wall studs that measure 3 inches by 4 inches. Also exposed is a 4-inch by 6-inch corner post supported by a downbrace attached to a 4inch by 8-inch vertically sawn sill that runs the length of the northwest wall of the main structure. Studs were cut completely through to install this downbrace, indicating that it was added after the original construction of the house. Almost all window sash has been removed as well as most shutters on the ground level. The majority of the doors and their associated hardware are gone. Some baseboard and trim has been removed. Modern wooden paneling has been salvaged by vandals. Electrical wiring and plumbing fixtures have been removed. The stud-frame room in the southeast portion of the ell addition has been destroyed. The partition wall between the kitchen and the shed portion of the ell has been removed from the

house, leaving just the stud and post framing. The chimney pile below the roof line is gone except for the terra cotta pot. Rugs have been removed from all rooms. Construction crews preparing the property for the proposed road improvements have removed the hedges that once separated the building from traffic on Newport Gap Pike.

Two outbuildings approximately 100 feet to the southwest of the dwelling sit within the current property's boundaries (Figure 4). A small frame gable-roofed one-story storage shed, sheathed with German siding, was probably built during the twentieth century. A slightly larger one-story frame gable-roofed building is possibly a late nineteenth-century chicken shed. Neither structure contributes to the Elliot House's period of significance.

Andrew Jackson Williams House

The Andrew Jackson Williams House (Plate 3) is located at 2200 Newport Gap Pike (State Route 41), Wilmington, Delaware, on the southern side of the road 0.25 miles west of its intersection with the Kirkwood Highway (State Route 2). The Williams House is immediately to the east of the Elliot House and is adjacent to the Baltimore & Ohio Railroad tracks. The dwelling, dating to the 1870s, is on approximately 3.3 acres on the Red Clay Creek flood plain composed of lawn, gardens, orchards and woodland with a 170-foot frontage along the Newport Gap Pike shielded by hedges. When it was first examined, the building's architectural character was excellent and much of its original fabric remained intact. Recent vandalism has removed many of its architectural features.

The house is a three-bay, two-story, gable-roofed frame structure with a two-bay, two-story, gable-roofed ell on the rear of the northwest gable end. A one-story frame shed-roofed addition is attached to the southwest end of the ell (Plate 4). The approximate overall dimensions of the northeast and northwest facades are 28½ feet by 42½ feet. The foundation of the dwelling consists of fieldstone that has been stuccoed on the exterior. The structure is completely sheathed with German siding except for the eastern facade of the ell and the shed addition, which are sheathed with asphalt shingle. The siding measures 5½ inches wide, 1 inch thick and leaves 5 inches revealed when the boards are overlapped. A small one-story shed-roofed porch, supported by square posts on an 11-foot by 7-foot

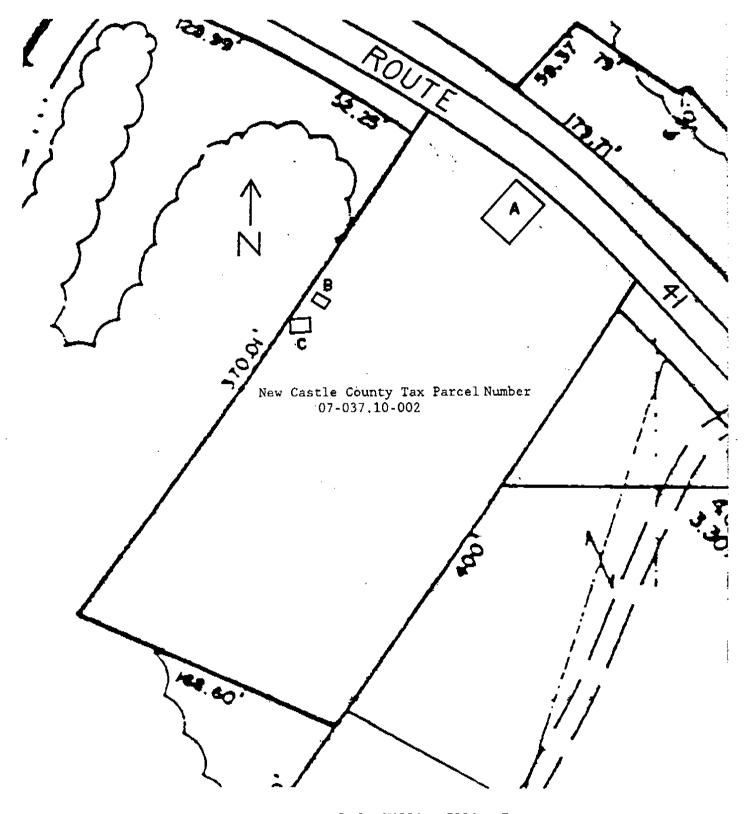


FIGURE 4: Site Map of the William Elliot Property

A: William Elliot House

B: Shed

C: Chicken Shed

Scale: 1 inch = 60 feet



PLATE 3: The Andrew Jackson Williams House (Photograph by David L. Ames, 1987)

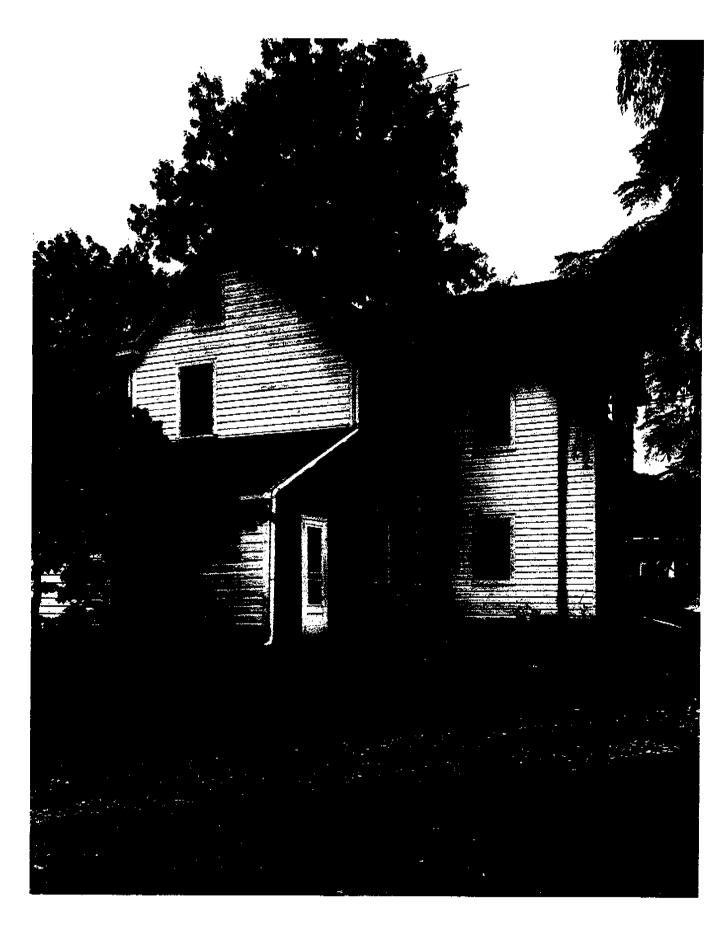


PLATE 4: Rear View of the Williams House (Photograph by David L. Ames, 1987)

poured concrete pad, is centered on the northeast facade. Mr. Paul E. Bower, a previous owner of the house, reports that a former porch along this facade extended the full length of the wall. The present porch was erected approximately twenty years ago after an automobile accident destroyed the earlier porch. The ceiling of the porch is finished with beaded tongue-and-groove boards. A single interior end chimney pile topped with a terra cotta/ceramic stack extends above the gable ridge of the ell. A similar chimney pot sits as a lawn ornament in the rear yard. A concrete block chimney pile on the exterior of the southeast facade of the addition is supported and braced by welded angle iron.

The door in the northeast facade has unadorned wooden surrounds topped by a three-light rectangular transom. The door, composed of four rectangular lights above two wooden panels, is of modern construction. There are two other entrances into the dwelling, both on the southeast facade of the addition. Ornamentation of these entries is similar to the formal entrance in the northeast facade, but both lack transoms. The door that leads into the kitchen from the patio has four lights over two panels, similar to the main entrance. The door into the shed from the patio area contains a large rectangular screen above a recessed panel.

Two pairs of two-over-two light sash are situated in the peaks of the main gable ends, while the gable end of the addition contains a single two-over-two light sash. Other windows consist of six-over-six light sash. The single exception is a nine-over-nine light sash that has been installed in place of an original door in the southeast gable end. Window treatment consists of plain wooden surrounds and sills, topped by a thin projecting shelf above unadorned lintels. But hinge style pintles are evident on all the window surrounds, but all shutters have been removed. Recessed panel shutters for the ground level and louvered ones for the upper story were later found in the attic of the dwelling.

The roof is currently covered by asphalt shingles and is ornamented with a shallow box cornice and unadorned frieze on the north facade. The gable ends exhibit partial returns with fascia and cyma recta molding and scroll brackets except for the gable end of the ell which lacks the brackets. A 12-foot by 14-foot poured concrete patio sits outside of the southeast facade.

The main block possesses a full basement with a poured concrete floor,

which may be entered from the first floor via a stairway or through bulkhead exterior doors and six concrete steps through the eastern foundation. This exterior basement entrance was installed in rather recent times. The interior stairway contains 10 treads, each 2 foot 11 inches wide, 9½ inches deep with a 7 inch rise. Among the visible structural elements in the basement are sills composed of 9-inch by 4-inch circular sawn beams. Floor joists measured 8-3/4 inches by 3½ inches and were also circular sawn. The flooring uses tongue-and-groove boards four inches wide. A hewn summer beam measured 9 inches by 8 inches and supported the main structure along its northeast/southwest axis. Two one-light windows are situated in the northwest foundation wall. One window penetrated the northeast foundation wall. The walls of the basement consisted of stuccoed fieldstone.

Interior space on the ground level of the main section is divided unequally into a two room or hall-parlor plan with a kitchen in the ell (Figure 5). Entry through the northeast facade leads into the smaller This room contains the staircase to the second floor. There are thirteen treads, each 2 feet 10% inches wide and 9 inches deep with an The closed string balustrade consists of twenty 1-1/8 inch 8 inch rise. square posts topped by a slender turned wooden handrail. The newel post is a 74 inch square wooden column crowned by beaded cyma molding and a square capital. Baseboards are 7% inches high, capped with 1% inch high cyma A plastered brick chimney flue, probably for use with a coal burning stove, projects from the northwest wall. The plaster walling of the flue stack has been extended to form a small cupboard. A panelled door encloses the cupboard space. The plaster covering the stack and cupboard is also ornamented with beaded corners. A door in the western corner of the room leads into the kitchen, while a large entry in the southeast wall opens into the larger room of the two-room plan. Both the door and the entryway are ornamented with cyma surrounds. A window pierces the northeast wall. Another window breaks the massing of the northwest wall south of the chimney flue. Window ornament consists of cyma surrounds similar to the door surrounds.

The larger front room or parlor lies to the east of the first. There are two doors in the western corner of the second room. One leads into the kitchen. The second door provides access to the basement stairway. The

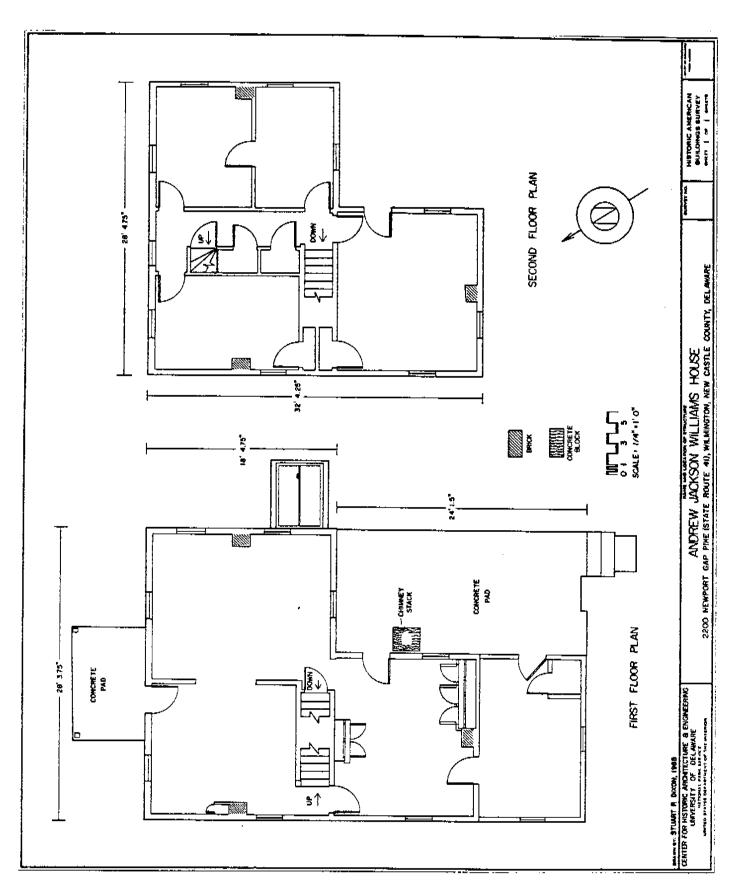


FIGURE 5: Floor Plan of the Williams House (Drawn by Stuart Dixon)

room is lit by four windows: one in the northeast wall looks onto Route 41, while another in the southwest wall overlooks the concrete patio. Two other windows penetrate the southeast wall on either side of a small projecting chimney flue placed similarly to the stack in the first room. Door, window and baseboard surround treatment is similar to the first room.

According to Mr. Bower, the parlor was once a general store: the walls were lined with shelves and the room could be entered from the outside through a door that has been replaced by a window in the southeast wall. Although no evidence remains of shelving, seams in the German siding below the window indicate that the space could formerly have contained an entry door. Since the Bower family has lived in the dwelling since the early 1920s, this store possibly survived into the early 1930s.

The kitchen can be entered from either of the front rooms, the patio, or the shed addition. One window in the southeast wall overlooks the patio area while another window pierces the northwest wall. Door and window surround treatment is similar to the other rooms. The most interesting feature is two sets of built-in cupboards and shelves that may date from the original construction. Evidence indicates that they have been altered, but the original panelled doors are still in use. A small chimney pile projects from the southwest wall with one side flush to one of the cupboards.

A single step leads from the kitchen down into the shed addition. Mr. Bower states that this addition replaced an earlier shed addition that was destroyed by fire during the 1920s. A door on the southeast wall faces onto the patio; windows are located on the southwest and northwest walls. According to Mr. Bower, this shed was formerly used as a coal bin, although no evidence supporting this usage pattern remains. A small closet space has been built in the south corner of the addition but is of recent vintage.

Immediately to the right at the top of the staircase is a large bedroom above the kitchen. Directly in front of the stairs is a full bathroom. To the left a hallway leads to the northeast wall. Along this hall are three doors. Proceeding toward the northeast wall, the first two doors enclose closet space while the third contains the stairwell to the attic. At the end of the hall is a window that overlooks Newport Gap Pike. To either side of this window are smaller bedrooms. The northwest bedroom also

contains a small closet that shares its rear wall with the closet in the large bedroom in the ell portion. A door from the small bedroom in the northeast corner leads into the bathroom. Window placement, surround treatment, and baseboard ornament are similar to those on the first floor. One additional feature is a door in the southeast wall of the large bedroom that still functions but that exits into the air space above the patio. Mr. Bower related that at one time the patio area contained a two-story enclosed porch into which this door entered.

The attic has been divided into three rooms, two of which are finished with lath and plaster. The attic over the main section contains the two finished rooms. These rooms are of approximately equal size. The attic stairs lead into the northern of these finished rooms. A door leads into the other finished room in the southern half of the main section. A second door leads from the northern attic room into the unfinished, unfloored attic of the addition. Common rafters, 4 inches by 2-1/2 inches, are butt-jointed at the peak. Mill-sawn ceiling joists, 6 inches by 3 inches, rest on 7-1/2 inch by 1 inch plates. The finished rooms are ornamented with 5 inch high molded baseboards. Vertical board-and-batten doors with beaded edges are used in the attic while recessed panel doors are used throughout the rest of the house.

Recent vandalism has removed many of the Williams House's original architectural features. All wall massing has been removed from the shed addition leaving only the stud and post framing. The studs revealed were one piece that ran from sill to plate. All three chimney piles have been Most of the window sash and doors have been taken as well as the built-in cupboards that had been installed in the kitchen. first floor, much of the ceiling and wall plaster and lath has been taken down. All balusters are missing from the staircase. On the second story. the partition wall between the two rooms in the eastern half of the main portion of the dwelling has been totally removed along with the partition wall shared with the hallway. Electrical wiring and plumbing fixtures have been removed. The bulkhead doors into the basement are missing. exterior siding has been stripped off the second story of the kitchen wing. Hedges that once shielded the property from traffic along Newport Gap Pike have been removed by construction crews preparing the property for the proposed highway improvements.

The property contains three frame utility buildings, all built since 1940 (Figure 6). A one-story three-sided leanto garage lies to the southwest of the dwelling. Two sheds, one gable-roofed, the other of leanto construction, sit a short distance south of the garage. These three buildings do not contribute to the Williams House's period of significance.

Summary

Both the Elliot House and the Williams House functioned as dwellings during the period of their significance. The historic theme Architecture, Engineering, & Decorative Arts normally would be most descriptive of the historic patterns associated with the Elliot and Williams houses. Ornamental motifs from three architectural styles popular in the mid-nineteenth century -- Greek Revival, Gothic Revival, and Italianate -- are exhibited in the two buildings and would tend to support this view. classical Greek motifs, Greek Revival structures were often ornamented with pedimented and/or colonnaded porches, elaborated entrances and surrounds, frieze boards and box cornices. Gothic Revival buildings exhibited centergable facades, pointed arch windows and projecting cornices. structures displayed large eave brackets and partial returns on their gable ends. The Elliot House possesses a center-gable facade penetrated with a pointed arch window in the attic and projecting cornices reminiscent of Gothic Revival. The Elliot house simultaneously possesses a colonnaded porch often found on Greek Revival structures. The Williams House juxtaposes frieze boards and box cornices normally found on Greek Revival structures with eave brackets and partial return gable ends imitative of Italianate buildings (Plate 5).6

The cumulative effect of the eclectic stylistic ornamentation on the two dwellings helps uncover the rich architectural heritage of the period and may reflect the tastes of individual homeowners. The lack of a dominant architectural style, however, suggests that stylistic and ornamental attributes were secondary considerations. The primary concern of the builders of the Elliot and Williams houses was the utilitarian requirements for shelter and home, not a desire to make a public statement regarding

⁶ For detailed descriptions of the above mentioned architectural styles see Virginia and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A. Knopf, Inc., 1986), pp. 179-184, 197-200, 210-214.

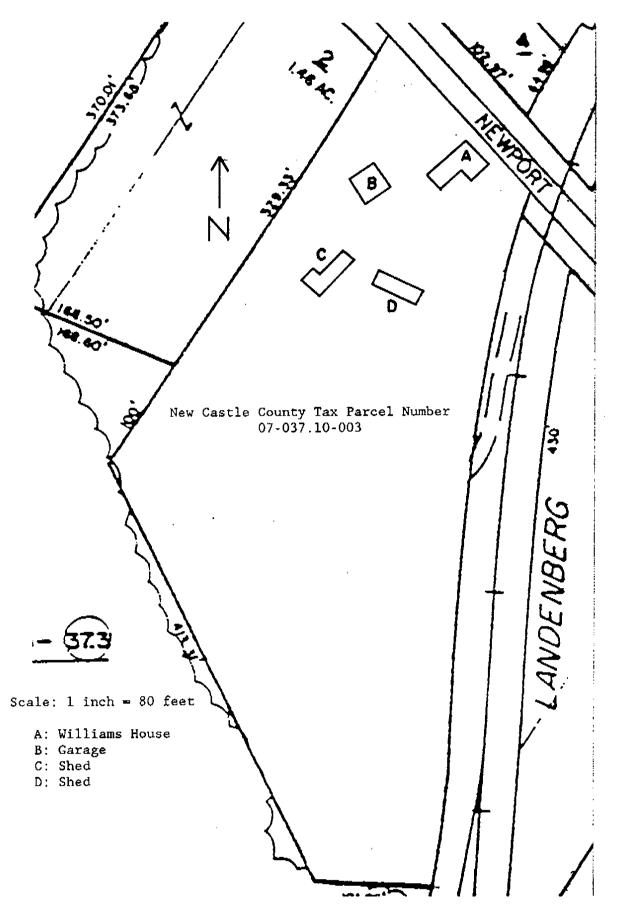


FIGURE 6: Site Map of the Andrew Jackson Williams Property

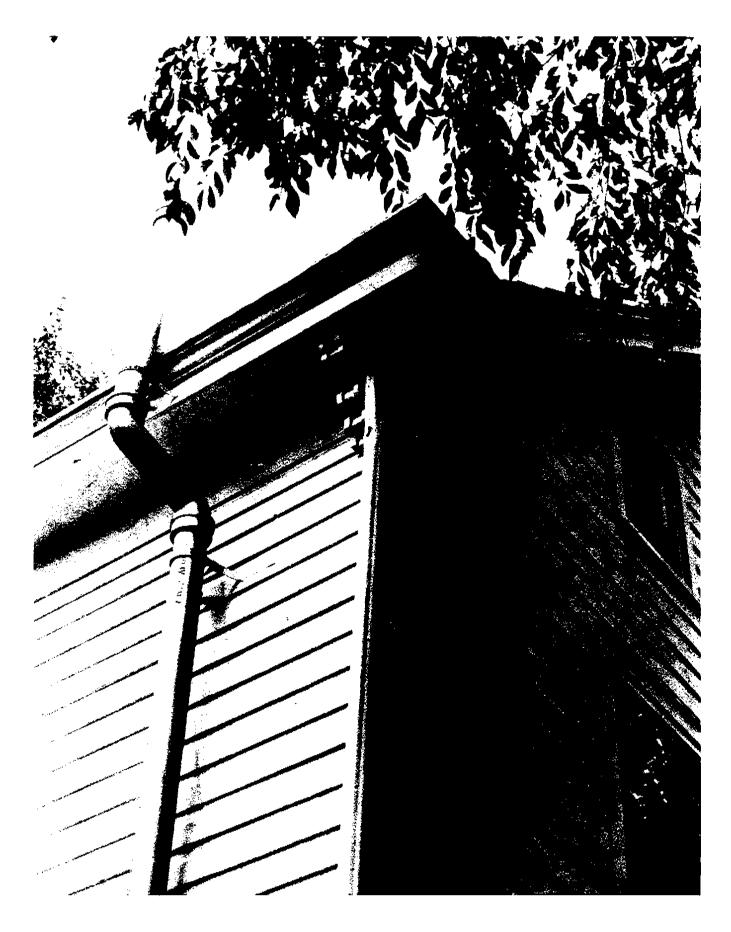


PLATE 5: Detail of the brackets on the Williams House (Photograph by David C. Bachman, 1985. Reprinted with the permission of DELDOT)

taste and status through architectural expression. The increased housing needs of the local community, a result of expanding manufacturing establishments and the introduction of the railroad into the Red Clay Creek valley during the 1870s, was the major contributor to the erection of the Elliot and Williams houses. As a result the Elliot and Williams houses most strongly relate to the historic themes Manufacturing and Transportation & Communication in the period 1830-1880 +/-.

Manufacturing

Red Clay Creek was an efficient source of power and the site of numerous milling establishments, some as early as the late seventeenth century (Figure 7). A saw mill of log construction was located in the Greenbank vicinity in 1677, while another was situated on Bread and Cheese Island south of Greenbank. The Graves Mill on Burris Run, a tributary of Red Clay Creek near Ashland, also operated during this period. The majority of these early mills were involved in an agricultural economy, grinding grains and sawing lumber for local consumption. The nineteenth century witnessed a great expansion in manufacturing on a national level. Through an increased diversification of mills and manufacturing establishments in the period 1830-1880 +/-, the Red Clay Creek valley participated in this burgeoning national economy.

Greenbank Mill, located just north of the Williams and Elliot houses, was a grist mill throughout the nineteenth century. When a series of international trade embargoes and the War of 1812 cut off the supply of inexpensive British woolens to America, Greenbank Mill expanded and added the Madison Factory in order to produce woolen goods. Built on the site of an earlier saw mill, the Madison Factory found it increasingly difficult to

⁷ For an excellent overview of manufacturing beside Red Clay Creek see C. W. Pursell, Jr., "That Never Failing Stream: A History of Milling Along Red Clay Creek During the Nineteenth Century" (M. A. thesis, University of Delaware, 1958).

⁸ Graves Mill Historic District, National Register of Historic Places Nomination, N-5005. On file at Bureau of Archaeology and Historic Preservation, Dover, Delaware. Hereafter cited as BAHP.

⁹ Greenbank Historic District, National Register of Historic Places Nomination, N-191. On file at BAHP.

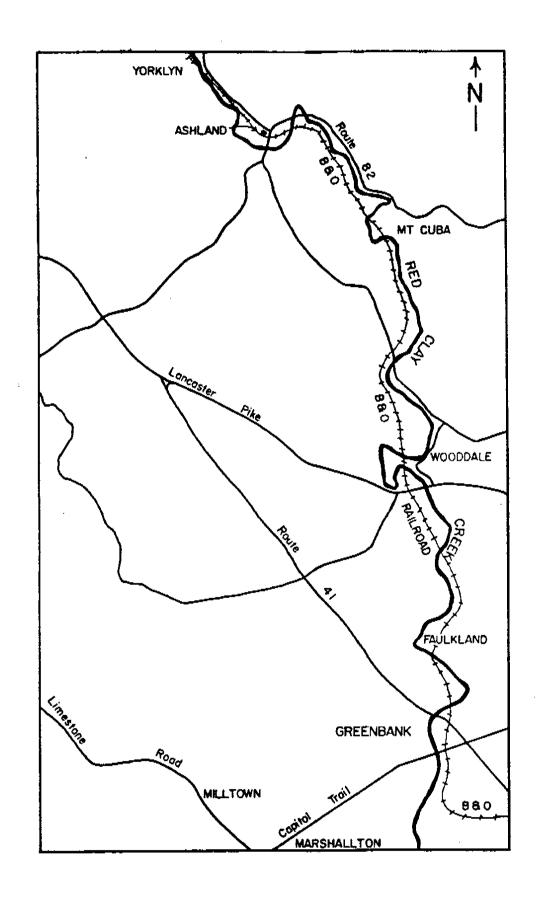


FIGURE 7: Map of the Red Clay Creek Valley showing historical manufacturing communities (redrawn from USGS map by Penelope Schaffer-Gioffre)

compete with the cheaper British woolens available after the end of the Robert Phillips Son & Company advertised "Broad Cloths, Narrow Cloths, Cassimers, Satinetts..." made at his Greenbank mill in 1818. 10 By 1822 Phillips was attempting to sell the mills in order to settle delinquent debts. After the mills and adjoining lands had been seized by the county sheriff, the properties were purchased by Phillips' son John C. in J. C. Phillips is listed as the owner of a merchant grist and saw mill in an 1833 inventory of United States manufactures. 11 Factory was probably converted to a saw mill in the intervening years. Title to the mill properties passed to William G. and Isaac D. Phillips. the sons of John C. Phillips. In 1852 the William G. Phillips & Bro. company began to produce wooden hubs, spokes, and felloes. were used in the manufacture of carriages, an extensive industry in Wilmington during the ante-bellum and Civil War years. In the 1870s the Wilmington carriage makers lost their leading role in the carriage manufacturing trade to concerns in St. Louis and Cincinnati. 12 The Phillips brothers began producing a wider variety of wooden bentware and agricultural implements such as forks, peach ladders, folding camp chairs and stools, and croquet mallets. Carpenter and ship turnings (presumably items produced on a lathe for the ship building industry) were advertised in 1870, as were house brackets and scroll and circular saw work. By the late nineteenth century, the wooden implement factory had closed, but the grist mill continued operations. At this time the Greenbank Mill began to import wheat and corn from farmers in the midwestern states, although earlier in the century the surrounding countryside had provided ample quantities of grain. 13

The Fell Spice Mill at Faulkland, just north of Greenbank along the Red Clay Creek, started grinding spices for shipment throughout the eastern

¹⁰ C. W. Pursell, Jr., Two Mills on Red Clay Creek in the Nineteenth Century (Wilmington: Historic Red Clay Valley, Inc., 1964), p. 24.

¹¹ Secretary of the Treasury, Documents Relative to the Manufactures in the United States (Washington: Duff Green, 1833), pp. 759-60, 779.

¹² Carol E. Hoffecker, Wilmington, Delaware, Portrait of an Industrial City, 1830-1910 (Eleutherian Mills-Hagley Foundation: University Press of Virginia, 1974), pp. 23-25.

¹³ Pursell, Two Mills, p. 28.

seaboard in 1828. 14 In that year Jonathan Fell purchased the saw and grist mill of William Foulk. This grist mill was formerly owned by Oliver Evans, the early American inventor whose innovations revolutionized grist mill operation in 1782. Fell's business was taken over by his son Courtland J. Fell upon his death in 1829. An 1833 list of manufactures described the C. J. Fell Mill as producing ground chocolate, mustard, ginger, and spices. 15 The Fell family manufactured spices well into the 1870s when a series of fires destroyed the mill. William Jenks Fell ran a grist mill at the site until 1894.

Ironworks were present along Red Clay Creek in the nineteenth century. 16 The Delaware Ironworks at Wooddale began in 1826 when James Wood and his son Alan started producing shovels and spades. 17 A slitting mill had been erected in 1814 by John Smith and Edward Gilpin but had not been an economic success. The Woods converted the nail factory into a sheet iron manufactory based on a method of uniformly producing sheets to a desired This process, patented by the family, was extremely important in the production of shovels strong enough to withstand use in the coal mines of southeastern Pennsylvania, the Woods' largest market. ironworks, originally leased, was purchased by the younger Wood in 1844. The property remained in the Wood family until 1891 and witnessed the development of "imitation Russia" sheet iron. This process, patented in 1851, actually produced sheet zinc that was similar to "blackplates" used in the manufacture of tinware. 18 More recently the National Vulcanized Fibre Corporation (NVF) has converted the site for the production of paper products.

The manufacture of snuff in the Red Clay Creek valley aided manufactur-

¹⁴ Fell Historic District, National Register of Historic Places Nomination, N-6760. On file at BAHP.

¹⁵ Secretary of the Treasury, Documents, pp. 715-6.

¹⁶ C. W. Pursell, Jr., Ironworks on the Red Clay Creek in the 19th Century; The Wooddale and Marshallton Mills of New Castle County, Delaware (Wilmington: Historic Red Clay Valley, Inc., 1962).

¹⁷ Wooddale Historic District, National Register of Historic Places Nomination, N-4092. On file at BAHP.

¹⁸ Pursell, Ironworks, pp. 16-17.

ing diversity and the area's involvement in the national economy. As early as 1782, John Garrett was manufacturing snuff in a converted grist mill at Yorklyn that had been owned by his grandfather. 19 Locally produced snuff was shipped throughout the southern and the western states during the nineteenth century. The mill was expanded in the 1840s with the addition of another mill building and workers' housing to the mill complex. Converted to steam power in the 1870s, the mill remained in the vanguard of snuff manufacturing technology up until the 1950s. The Garrett family retained ownership of the mill until 1897. A short time later the mill was acquired by the American Tobacco Company.

Textile mills were also in operation along Red Clay Creek in the nineteenth century. Robert P. Robinson ran a wool carding mill on Hyde Run, a tributary of the creek north of Greenbank. The Greenbank Mill produced woolen cloth, while a cotton mill had been established in Stanton in 1815. The Kiamensi Woolen Factory and the Stanton Woolen Company were in operation for large portions of the 1800s.

Perhaps the most interesting milling establishment in the nineteenth century was the Auburn Mills in Yorklyn. ²⁰ This mill serves as an excellent example of the wide diversity of manufacturing endeavors attempted along the creek. A grist mill in 1726, it was converted to a paper mill in 1805. Thomas Lea spun cotton at the mill in 1813. Jacob Pusey purchased the mill about 1830 and is listed as producing spun cotton in an 1833 report on American manufacturing. ²¹ William and James Clark operated a woolen mill at Auburn after they purchased it in 1862. The mill burned down in 1880, but it was later rebuilt and operated as a paper mill by T. Elwood Marshall, Israel W. Marshall, and S. Franklin Evart. These men pioneered the manufacture of Insulite, a corrugated paper product.

Examination of contemporary documents helps reveal the changing character of life in the Greenbank and Red Clay Creek valley areas in the last half of the nineteenth century from primarily rural agriculture to mixed

¹⁹ Garrett Snuff Mill Historic District, National Register of Historic Places Nomination, N-4098. On file at BAHP.

²⁰ Auburn Mills Historic District, National Register of Historic Places Nomination, N-5003. On file at BAHP.

²¹ Secretary of the Treasury, Documents, pp. 781, 800-2.

farming and industry. 22 Listings of occupations show that early in the nineteenth century farming was the dominant economic activity with wheel-wrights and blacksmiths also in evidence. Most indicative of the growth of manufacturing concerns during the last half of the nineteenth century are employment figures for the various mills. The Marshallton Ironworks and the Kiamensi Cotton Mill together employed sixty-five men in 1860. Ten years later the two mills totaled ninety-seven employees. 23 Employment at the mills was sometimes seasonal and often affected by outside market conditions. The longevity of the establishments, however, helps document their success and their impact on the community.

Manufacturing and the Elliot House

The Marshallton Ironworks were closely related to the building of the Elliot House. Located south of the Elliot house along Red Clay Creek, the Marshallton Ironworks was situated near the site of a grist mill operated by James Buckingham in 1819.24 According to an 1833 list of manufactures, James Buckingham operated a grist mill at the site. 25 The grist mill was purchased by John Marshall in 1835 and expanded by the addition of a rolling mill. Marshall, married to the daughter of John C. Phillips of the Greenbank Mill, built and operated a rolling mill in partnership with his The mill changed owners several times but continued to brother Caleb. manufacture sheet iron, producing 393 tons in 1859 and 500 tons in 1870. John Bringhurst purchased the mill in 1877 and expanded operations by installing steam-driven machinery and electric lights. The mills' greatest period of production came in the 1880s: from producing 700 tons of sheet metal in 1880, the plant was able to manufacture 2400 tons of sheet in 1884. Part of this expansion was due to attempts to produce a special-

²² United States Census, State of Delaware, Manuscript Returns: 1860, 1870, 1880, 1900. Microfilm on file at Center for Historic Architecture and Engineering, University of Delaware, Newark, Delaware. Hereafter cited as CHAE.

²³ U. S. Census, State of Delaware, Agricultural Schedules: 1850, 1860, 1870, 1880; also U. S. Census, State of Delaware, Industry Schedules: 1850, 1860, 1870, 1880. Microfilm on file at CHAE.

 $^{^{24}}$ For an overview of this ironworks see Pursell, *Ironworks*.

²⁵ Secretary of the Treasury, Documents, pp. 766-7, 779.

finish sheet iron known as tin-plate.

Tin-plate was a method of applying tin to sheet iron that was extensively practiced in Great Britain. 26 Used to produce domestic and dairy utensils, tin-plate became extremely popular in the late nineteenth century for use in food canning and gasoline packaging and in the production of roofing material. Until the 1890s England possessed a virtual world monopoly on tin-plate production, while the United States was the largest importer of the sheet metal. Attempts to produce tin-plate in the United States had begun in the 1820s but were not financially successful. Starting in the 1860s, demand for tin-plate made production lucrative, and American manufacturers again attempted to refine the process. Immigrants knowledgeable in tin-plate production techniques began to be available due to periodic depressions in England. William Elliot, born in England and listed as a tinsmith in the 1880 Census, was probably associated with tin-plate manufacturing attempts at the Marshallton factory.

Prior to 1875, the site of the Elliot House was part of a larger farm parcel owned by James Cranston (Figure 8). The Delaware State Directory and Gazetteer for 1874-1875 lists William Elliot as a tinner living in Wilmington. 27 In 1875 Elliot purchased a one-acre parcel from Cranston. 28 Although previously assessed only thirty dollars, in 1881 Elliot was listed as the owner of a lot containing a frame house and frame shop valued at \$1000 (Figure 9). 29 The term "tinner" is difficult to interpret, especially with the presence of the Marshallton mill in the vicinity. Wilmington also had a sizeable tinware manufacturing community. Twelve tinware manufacturers employing over sixty men are listed in the 1880 Industrial Schedule. Although Elliot might have operated a tinsmith shop in his "frame shop," in all likelihood he was working at the Marshallton mill.

²⁶ For an excellent examination of this industry see W. E. Minchinton, The British Tinplate Industry, A History (Oxford: Clarendon Press, 1957).

²⁷ The Delaware State Directory and Gazetteer For 1874-75 (Wilmington, Delaware: Commercial Printing Co., 1874), p. 133.

²⁸ New Castle County Deed Book: 0-10-177: New Castle County Recorder of Deeds, Wilmington, Delaware. Hereafter cited as NCCRD.

²⁹ New Castle County Tax Assessments: Christiana Hundred, 1877-1881; On file at Delaware State Archives, Hall of Records, Dover, Delaware. Hereafter cited as DSA.

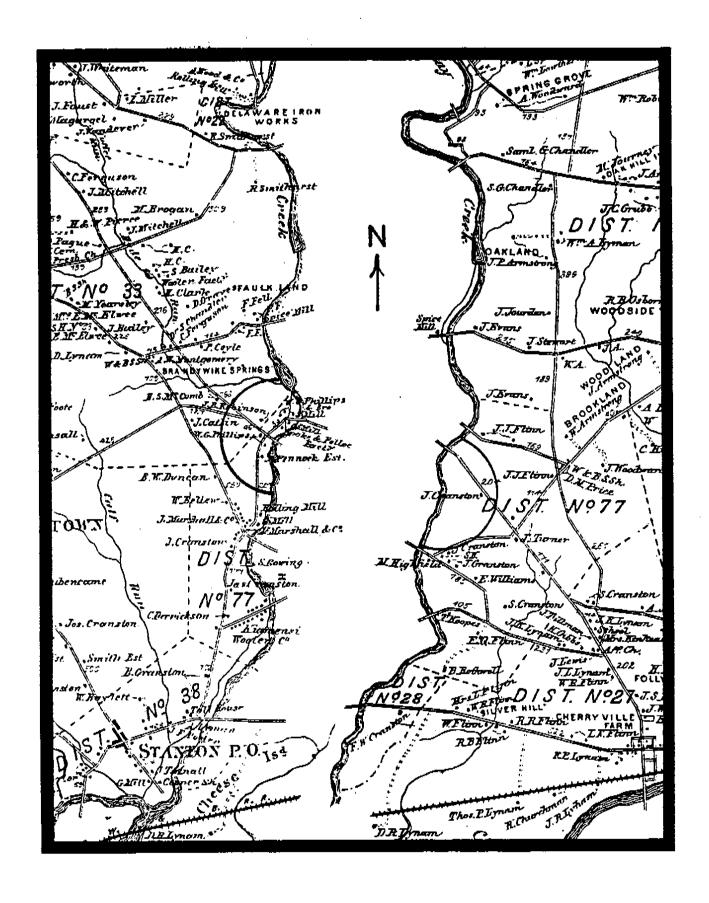


FIGURE 8: Detail from D. G. Beers' Atlas of the State of Delaware, 1868

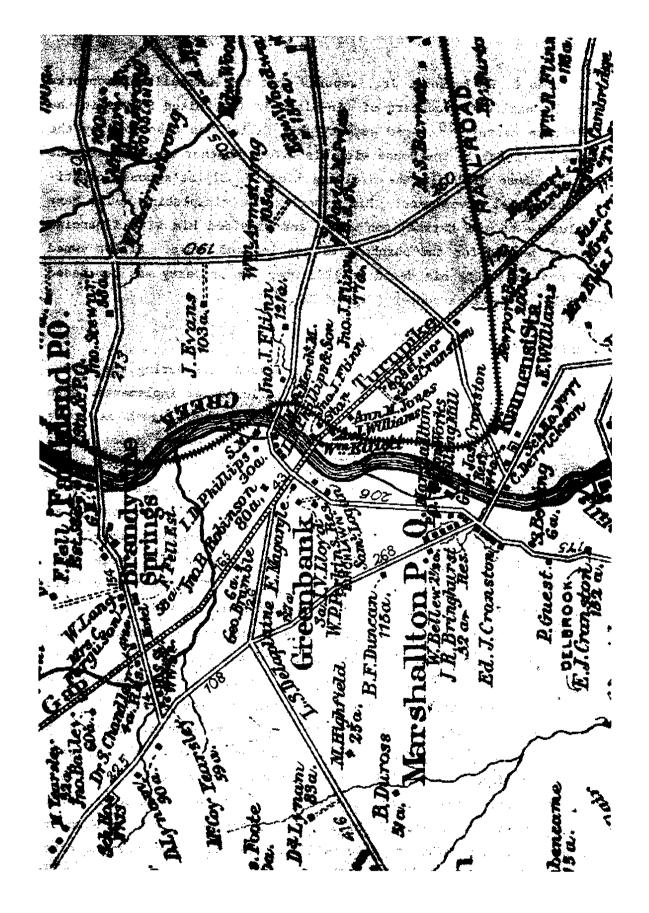


FIGURE 9: Detail from G. M. Hopkins' Atlas of New Castle County, Delaware, 1881 (Reprinted courtesy of Special Collections, Morris Library, University of Delaware)

Local historian C. W. Pursell, Jr., reports that the Marshallton Ironworks was among the earliest producers of tin-plate in the United States in the late nineteenth century. 30 Aged seventy-one, Elliot was described by the 1880 Census as living in the house with his wife. Whether he purchased the lot with the house or built the dwelling himself, Elliot's house constituted a substantial investment. His expertise in tin-plating would have proven valuable to the Marshallton mill, and provided him with financial opportunities needed for the purchase of the lot and house. Elliot owned the house and lot until his death in 1885 when the property was purchased by Bowen Pyle, a local carpenter (Figure 10).31

Manufacturing and the Williams House

The Williams House strongly relates to Greenbank Mill during the 1870s, a period when the mill was producing wooden agricultural implements, such as peach ladders and forks, and architectural ornaments, such as house brackets and scroll saw work. The manufacture of wooden items was a supplement to the grist mill operation that had continued operation since the early nineteenth century. The mill, just north of the Williams House along Red Clay Creek contributed to the growth of the local community, as evidenced by the construction of the Williams House during this period.

Prior to 1873 the site of the Williams House was part of a larger farm parcel owned by James Cranston (see Figure 8, p. 34). Area residents state that five houses of similar size, plan and appearance, including the Elliot and the Williams houses, stood at one time along the southern side of Newport Gap Pike. After demolition of the Elliot and Williams houses, only one of these five will remain. Mr. Paul E. Bower, former owner of the Williams House, states that he once met the daughter and granddaughter of A. J. Williams, who informed him that the five houses were constructed by A. J. Williams over a period of years. Recent vandalism of the Williams House has revealed the date 1871 incised in the mortar of the northwest chimney pile. Deed transactions do not reveal property transfers from James Cranston, who owned all of the land along the south side of Newport Gap Pike prior to the 1870s, to A. J. Williams for more than the one acre

³⁰ Pursell, Ironworks, p. 24.

³¹ NCC Deed Book: W-18-558; NCCRD.

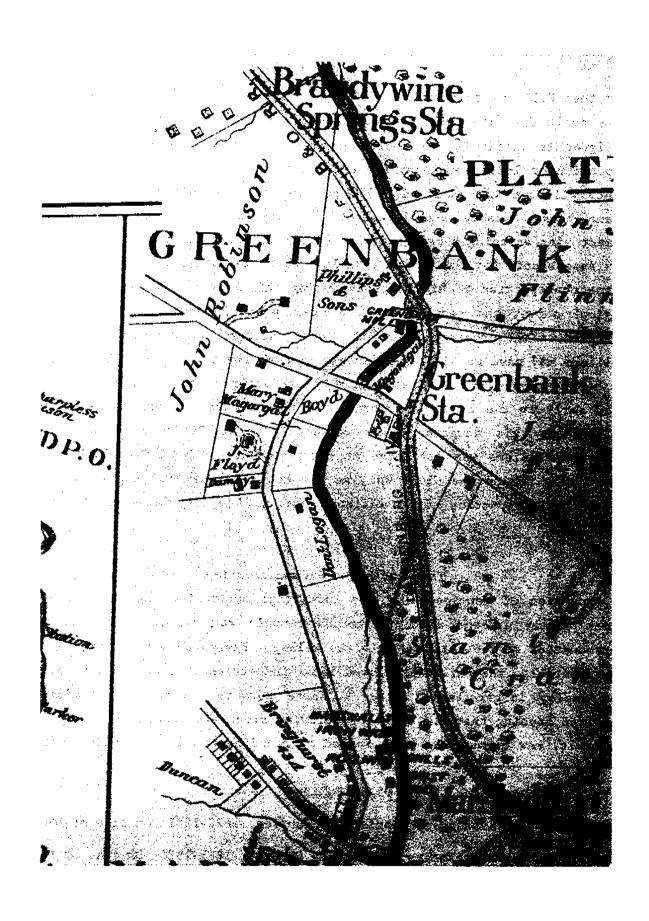


FIGURE 10: Detail from W. G. Baist's Atlas of the State of Delaware, 1894 (Reprinted courtesy of Special Collections, Morris Library, University of Delaware)

lot that Williams purchased in 1873 (see Figure 9, p. 35).32 Williams may have built the five dwellings for James Cranston in a speculative venture designed to profit by the increased need for housing necessitated by the expansion of local manufacturing establishments. In the 1878 tax assessment, Williams was assessed \$1050 for one and one-half acres of land, a frame house, stable and livestock. 33 Williams is listed in various directories as being a merchant, ladder manufacturer, plasterer, and mason. Tax assessments for the period 1881-1885 show that Williams added a mill of frame construction to his property during this time. 34 A recent archaeological survey has revealed that a steam-powered wood lathe or saw mill operated on the property during the latter half of the nineteenth century. Williams may have manufactured ladders on his property in this "frame mill" or been employed at the Greenbank Mill producing peach ladders. Williams died early in the twentieth century, shortly before the property was sold in 1902 by his daughter, Mary E. Williams, to Benjamin A. Groves. 35 Although Williams was stationed at Fort du Pont north of Greenbank for a short time during the Civil War, he was not a resident of the area until after the introduction of the railroad into the Red Clay Creek valley. 36

Transportation & Communication

Expansion of manufacturing and industrial enterprises in the Red Clay Creek valley in the late nineteenth century was primarily due to the introduction of the railroad into the valley. Easing access to markets and raw materials, the railroad allowed local industries to increase production and employ larger labor forces. These workers, often with families, required housing that the existing building stock was unable to supply. As a result, new communities were formed surrounding the local manufactories.

³² NCC Deed Book; C-10-505/6; NCCRD.

³³ NCC Tax Assessment: Christiana Hundred, 1877-1881; On file at DSA.

³⁴ NCC Tax Assessments: Christiana Hundred, 1881-1885; On file at DSA.

³⁵ NCC Deed Books: Z-18-538; NCCRD.

 $^{^{36}}$ Scharf, p. 370. Williams' first appearance in the area is on the $^{1878-1881}$ tax assessment for Christiana Hundred.

The erection of the Elliot and Williams houses can be seen as responses to this need for housing and thus strongly relate to the historic theme Transportation & Communication in the period 1830-1880 +/-.

The period 1830-1880 +/- was characterized by the development of transportation networks that allowed people and goods to travel faster and more easily between the urban coastal areas and the agricultural hinterlands. An important early link in this transportation network was the Gapto-Newport Turnpike completed in 1818.37 This turnpike followed much of present day Route 41 and allowed teamsters to carry grain to the wharves of Newport, a terminal of the intra-coastal trading network. From Newport, shallow draft ships could take produce down the Christina River to Wilmington and other ports along the eastern seaboard. The Gap-to-Newport Turnpike also gave the millers and manufacturers along Red Clay Creek easier access to raw materials. Establishments such as the Fell Spice Mill, the Delaware and the Marshallton Ironworks, the Garrett Snuff Mills, and the Auburn Cotton Mills relied on outside sources for materials to transform into finished goods. These establishments also depended on effective transportation networks to provide access to markets in which to sell their manufactured goods. Relatively few of the products were sold The many grist mills also relied on transportation networks to carry flour and meal when New Castle County became a great grain producer in the late eighteenth and early nineteenth centuries. Desiring to take advantage of new markets in the western territories of the United States, local manufacturers helped spur the construction of the Wilmington and Western Railroad in 1872. Ultimately the increase of effective transportation networks aided in the destruction of eastern wheat producing and exporting establishments.

The first attempt by manufacturers in the Greenbank area to have rail service extended into the Red Clay Creek valley was in 1867 when the Delaware & Chester County Rail Road Company was incorporated by the State

³⁷ Priscilla M. Thompson, Springs/Red Clay Area, A Narrative Historical Overview, Newport to Gap Pike - Route 41, New Castle County, DE, Delaware Department of Transportation Archeology Series no. 49 (Dover, Delaware, 1986), pp. 10-13.

of Delaware.³⁸ Among the initial directors of this corporation were William G. Phillips and Edward Mendenhall, owners of the Greenbank Mill and the Marshallton Ironworks respectively. In 1869 the corporation charter was amended, and the concern was renamed the Wilmington and Western Railroad Company. Although the floodplain of Mill Creek was considered as a possible route, the directors decided to follow the path of Red Clay Creek since more manufacturing establishments were located there. Local manufacturers envisioned the railroad connecting them to greater and more distant markets.

Construction of the railroad began with groundbreaking ceremonies on the property of C. J. Fell at Faulkland. Among the second board of directors elected at the groundbreaking ceremony were Phillips, Alan Wood of the Delaware Ironworks, and William Garrett of the Yorklyn snuff mills. Wood and two other men later purchased \$500,000 of railroad bonds. 39 Wood also donated land for a station at Wooddale. Fell sold land for a station at Faulkland to the rail company for one dollar. A telegraph line was erected along the route to help facilitate the movement of freight and passengers. The importance of the railroad to the continued growth and expansion of the manufacturing communities along Red Clay Creek can be best described by the expectations of Alan Wood in 1872. Wood speculated that if the railroad could dependably deliver coal to his factory, he could convert to steam operated mills and triple his output. 40 Although the Wilmington and Western Railroad passed into receivership in 1875 and was eventually purchased by the B & O Railroad, the introduction of the railroad into the valley had a great impact on many of the manufacturing establishments along Red Clay Creek and their communities.

Railroads and the Elliot and Williams Houses

The introduction of the railroad in 1872 allowed both the Marshallton

³⁸ Wilmington and Western Railroad, National Register of Historic Places Nomination, N-4091. On file at BAHP. Also see Arthur G. Volkman, The Story of the Wilmington and Western Railroad (Wilmington: Historic Red Clay Valley, Inc., 1963).

³⁹ Volkman, p. 26.

⁴⁰ Volkman, p. 34. Pursell, in *Ironworks*, quotes a source that states Wood's increase would be five or six fold, p. 20.

Ironworks and the Greenbank Mill, as well as other manufacturing establishments in the Red Clay Creek valley, to expand their production capabilities since raw materials and finished goods were transported more easily. With the support of local manufacturers, the Wilmington and Western Railroad stations were erected at or near the larger mills along Red Clay Creek including Marshallton and Greenbank.

The railroad contributed to an increase in employment opportunities at the Marshallton Ironworks. A railroad siding was built into the factory in order to facilitate the movement of goods at the plant. railroad, Marshallton was not described as a separate entity from Newport. After the arrival of the railroad, the Delaware State and Peninsula Directory for 1882 described Marshallton as a thriving manufacturing community consisting of neat new cottages and residences, many of whose inhabitants were employed at the extensive ironworks. 41 Twenty-five men labored at the Marshallton mill in 1860. By 1870 the Marshallton mill employed thirty seven men, and in 1880 the total had risen to fifty-five. 42 This increase in workers and laborers in the Red Clay Creek valley required additional housing. The Elliot House, constructed after the introduction of the railroad into the valley, may be viewed as a product of this expanded manufacturing community. The house was not built until after the appearance of the railroad in the community, a period when the Marshallton Ironworks expanded greatly and attempted to manufacture tin-plate.

The relation of the Williams House to transportation networks in the Red Clay Creek valley is much more direct and obvious. At the time of the railroad's opening, a local newspaper listed A. J. Williams as the station agent at Greenbank.⁴³ The Williams House is directly across Newport Gap Pike from the Greenbank Station (Plate 6). Among the duties of the agent were selling tickets, checking baggage and freight, and opening and closing the station each day.⁴⁴ The station also contained a telegraph line.

⁴¹ The Delaware State and Peninsula Directory For 1882 (Wilmington, Delaware; Ferris Bros., 1882), p. 188.

 $^{^{42}}$ U. S. Census, State of Delaware, Industry Schedules, 1860, 1870, 1880. Microfilm on file at CHAE.

⁴³ Volkman, p. 47.

⁴⁴ Volkman, p. 42.



PLATE 6: View of the Williams House and the Wilmington & Western Railroad Depot (Photograph by David C. Bachman, 1985. Reprinted with permission of DELDOT)

Since trains did not always keep to schedule, the location of the Williams home probably proved very beneficial to the railroad. Within the community the station agent held a position of respect and esteem, since the railroad was an important economic link with Wilmington and points beyond. Williams' son John probably worked at the station as he is listed as "Clerk Rail house" in the 1880 census. The Wilmington and Western Railroad was forced into receivership by the national economic panic of 1873. Although the railroad was soon reorganized as the Delaware and Western Railroad, there is no evidence that Williams continued to work for the railroad. It was at this time that Williams turned to carpentry and housing construction.

Conclusion

The William Elliot House (built ca. 1875) and the Andrew Jackson Williams House (ca. 1873) are significant as examples of the transformation of rural areas in the late nineteenth century into centers of early industry and transportation networks. Long the site of milling and manufacturing establishments, the Red Clay Creek valley was dotted with small industrial hamlets by the 1870s. The late nineteenth century witnessed a shift from agricultural milling establishments to diverse manufacturing enterprises along Red Clay Creek. This shift mirrored developments in the growing industrial economy of northern New Castle County. Seeking more effective transportation in order to avail themselves of sources of raw materials and of markets, local manufacturers supported the construction of the Wilmington and Western Railroad. The introduction of the railroad allowed for a degree of expansion that needed larger workforces and resulted in new housing. The Elliot and Williams houses are associated with these events in the Red Clay Creek valley and reflect the growth of manufacturing and the need for related dwellings. The development of industry and transportation in the Red Clay Creek valley during the period 1830-1880 +/- was extremely significant in the erection of the Elliot and Williams houses and supports their eligibility for listing on the National Register of Historic Places under Criterion A (reflection of broad patterns of history). Evidence that both houses were possible sites of small shops (for ladder manufacturing and tinning) further supports

Manufacturing as a historic theme influential in the building of the Elliot and Williams houses. Although the two houses functioned as dwellings during the period of their significance, the emphasis of utilitarian requirements overshadows the importance of architectural styling and ornament as statements of aesthetic taste and social status.